

TECH CENTER R 1600/2900

JAN 8 2002

RECEIVED
#6
5

1645

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/770,916DATE: 01/29/2002
TIME: 12:06:18Input Set : A:\Mcw91481.app
Output Set: N:\CRF3\01292002\I770916.raw

ENTERED

3 <110> APPLICANT: Frank, Dara W.
4 Wiener-Kronish, Jeannine
5 Yahr, Timothy L.
6 Sawa, Teiji
7 Fritz, Robert B.
9 <120> TITLE OF INVENTION: Method of and compositions for immunization with the
10 pseudomonas v antigen
12 <130> FILE REFERENCE: 650053.91487
14 <140> CURRENT APPLICATION NUMBER: 09/770,916
15 <141> CURRENT FILING DATE: 2001-01-26
17 <150> PRIOR APPLICATION NUMBER: 09/448,339
18 <151> PRIOR FILING DATE: 1999-11-23
20 <150> PRIOR APPLICATION NUMBER: 60/109,952
21 <151> PRIOR FILING DATE: 1998-11-25
23 <150> PRIOR APPLICATION NUMBER: 60/126,794
24 <151> PRIOR FILING DATE: 1999-03-30
26 <160> NUMBER OF SEQ ID NOS: 4
28 <170> SOFTWARE: PatentIn Ver. 2.1
30 <210> SEQ ID NO: 1
31 <211> LENGTH: 1588
32 <212> TYPE: DNA
33 <213> ORGANISM: mouse
35 <220> FEATURE:
36 <221> NAME/KEY: CDS
37 <222> LOCATION: (33)..(1466)
39 <220> FEATURE:
40 <221> NAME/KEY: sig_peptide
41 <222> LOCATION: (33)..(89)
43 <220> FEATURE:
44 <221> NAME/KEY: V_region
45 <222> LOCATION: (57)..(179)
46 <223> OTHER INFORMATION: FR1
48 <220> FEATURE:
49 <221> NAME/KEY: V_region
50 <222> LOCATION: (180)..(194)
51 <223> OTHER INFORMATION: CDR1
53 <220> FEATURE:
54 <221> NAME/KEY: V_region
55 <222> LOCATION: (195)..(236)
56 <223> OTHER INFORMATION: FR2
58 <220> FEATURE:
59 <221> NAME/KEY: V_region
60 <222> LOCATION: (237)..(284)

1/29/02

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/770,916

DATE: 01/29/2002
TIME: 12:06:18

Input Set : A:\Mcw91481.app
Output Set: N:\CRF3\01292002\I770916.raw

```

61 <223> OTHER INFORMATION: CDR2
63 <220> FEATURE:
64 <221> NAME/KEY: V_region
65 <222> LOCATION: (285)..(380)
66 <223> OTHER INFORMATION: FR3
68 <220> FEATURE:
69 <221> NAME/KEY: V_region
70 <222> LOCATION: (381)..(425)
71 <223> OTHER INFORMATION: CDR3
73 <220> FEATURE:
74 <221> NAME/KEY: V_region
75 <222> LOCATION: (426)..(458)
76 <223> OTHER INFORMATION: FR4
78 <220> FEATURE:
79 <221> NAME/KEY: C_region
80 <222> LOCATION: (459)..(1466)
82 <400> SEQUENCE: 1
83 ccatacctctt ctcatagagc ctccatcaga gc atg gct gtc ttg ggg ctg ctc 53
84                                     1                               5
85                                     Met Ala Val Leu Gly Leu Leu
87 ttc tgc ctg gtg aca ttc cca agc tgt gtc cta tcc cag gtg cag ctg 101
88 Phe Cys Leu Val Thr Phe Pro Ser Cys Val Leu Ser Gln Val Gln Leu
89                                     10                               20
91 aag cag tca gga cct ggc cta gtg cag ccc tca cag agc ctg tcc atc 149
92 Lys Gln Ser Gly Pro Gly Leu Val Gln Pro Ser Gln Ser Leu Ser Ile
93                                     25                               30
95 acc tgc aca gtc tct ggt ttc tca tta act agc tat ggt gta cac tgg 197
96 Thr Cys Thr Val Ser Gly Phe Ser Leu Thr Ser Tyr Gly Val His Trp
97 40                                     45                               50
99 gtt cgt cag tct cca gga aag ggt ctg gag tgg ctg gga gtg ata tgg 245
100 Val Arg Gln Ser Pro Gly Lys Gly Leu Glu Trp Leu Gly Val Ile Trp
101                                     60                               70
103 agt ggt gga gac aca gac tat aat gca gct ttc ata tcc aga ctg agc 293
104 Ser Gly Gly Asp Thr Asp Tyr Asn Ala Ala Phe Ile Ser Arg Leu Ser
105                                     75                               80
107 atc agc aag gac aat tcc aag agc caa ctc ttc ttt aaa atg aac agt 341
108 Ile Ser Lys Asp Asn Ser Lys Ser Gln Leu Phe Phe Lys Met Asn Ser
109                                     90                               100
111 ctg cga gct act gac aca gcc ata tat tac tgt gcc aga aat aga ggg 389
112 Leu Arg Ala Thr Asp Thr Ala Ile Tyr Tyr Cys Ala Arg Asn Arg Gly
113                                     105                               110
115 gat att tac tat gat ttc act tat gcc atg gac tac tgg ggt caa gga 437
116 Asp Ile Tyr Tyr Asp Phe Thr Tyr Ala Met Asp Tyr Trp Gly Gln Gly
117 120                                     125                               130
119 acc tca gtc acc gtc tcc tca gcc aaa aca aca ccc cca tca gtc tat 485
120 Thr Ser Val Thr Val Ser Ser Ala Lys Thr Thr Pro Pro Ser Val Tyr
121                                     140                               145
123 cca ctg gcc cct ggg tgt gga gat aca act ggt tcc tcc gtg act ctg 533
124 Pro Leu Ala Pro Gly Cys Gly Asp Thr Thr Gly Ser Ser Val Thr Leu

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/770,916

DATE: 01/29/2002

TIME: 12:06:18

Input Set : A:\Mcw91481.app

Output Set: N:\CRF3\01292002\I770916.raw

125		155		160		165		581
127	gga tgc ctg gtc aag ggc tac ttc cct gag tca gtg act gtg act tgg							
128	Gly Cys Leu Val Lys Gly Tyr Phe Pro Glu Ser Val Thr Val Thr Trp							
129		170		175		180		629
131	aac tct gga tcc ctg tcc agc agt gtg cac acc ttc cca gct ctc ctg							
132	Asn Ser Gly Ser Leu Ser Ser Ser Val His Thr Phe Pro Ala Leu Leu							
133		185		190		195		677
135	cag tct gga ctc tac act atg agc agc tca gtg act gtc ccc tcc agc							
136	Gln Ser Gly Leu Tyr Thr Met Ser Ser Ser Val Thr Val Pro Ser Ser							
137	200		205		210			725
139	acc tgg cca agt cag acc gtc acc tgc agc gtt gct cac cca gcc agc							
140	Thr Trp Pro Ser Gln Thr Val Thr Cys Ser Val Ala His Pro Ala Ser							
141		220		225		230		773
143	agc acc acg gtg gac aaa aaa ctt gag ccc agc ggg ccc att tca aca							
144	Ser Thr Thr Val Asp Lys Lys Leu Glu Pro Ser Gly Pro Ile Ser Thr							
145		235		240		245		821
147	atc aac ccc tgt cct cca tgc aag gag tgt cac aaa tgc cca gct cct							
148	Ile Asn Pro Cys Pro Pro Cys Lys Glu Cys His Lys Cys Pro Ala Pro							
149		250		255		260		869
151	aac ctc gag ggt gga cca tcc gtc ttc atc ttc cct cca aat atc aag							
152	Asn Leu Glu Gly Gly Pro Ser Val Phe Ile Phe Pro Pro Asn Ile Lys							
153		265		270		275		917
155	gat gta ctc atg atc tcc ctg aca ccc aag gtc acg tgt gtg gtg gtg							
156	Asp Val Leu Met Ile Ser Leu Thr Pro Lys Val Thr Cys Val Val Val							
157	280		285		290			965
159	gat gtg agc gag gat gac cca gac gtc cag atc agc tgg ttt gtg aac							
160	Asp Val Ser Glu Asp Asp Pro Asp Val Gln Ile Ser Trp Phe Val Asn							
161		300		305		310		1013
163	aac gtg gaa gta cac aca gct cag aca caa acc cat aga gag gat tac							
164	Asn Val Glu Val His Thr Ala Gln Thr Gln Thr His Arg Glu Asp Tyr							
165		315		320		325		1061
167	aac agt act atc cgg gtg gtc agc acc ctc ccc atc cag cac cag gac							
168	Asn Ser Thr Ile Arg Val Val Ser Thr Leu Pro Ile Gln His Gln Asp							
169		330		335		340		1109
171	tgg atg agt ggc aag gag ttc aaa tgc aag gtc aac aac aaa gac ctc							
172	Trp Met Ser Gly Lys Glu Phe Lys Cys Lys Val Asn Asn Lys Asp Leu							
173		345		350		355		1157
175	cca tca ccc atc gag aga acc atc tca aaa att aaa ggg cta gtc aga							
176	Pro Ser Pro Ile Glu Arg Thr Ile Ser Lys Ile Lys Gly Leu Val Arg							
177	360		365		370			1205
179	gct cca caa gta tac atc ttg ccg cca cca gca gag cag ttg tcc agg							
180	Ala Pro Gln Val Tyr Ile Leu Pro Pro Pro Ala Glu Gln Leu Ser Arg							
181		380		385		390		1253
183	aaa gat gtc agt ctc act tgc ctg gtc gtg ggc ttc aac cct gga gac							
184	Lys Asp Val Ser Leu Thr Cys Leu Val Val Gly Phe Asn Pro Gly Asp							
185		395		400		405		1301
187	atc agt gtg gag tgg acc agc aat ggg cat aca gag gag aac tac aag							
188	Ile Ser Val Glu Trp Thr Ser Asn Gly His Thr Glu Glu Asn Tyr Lys							
189		410		415		420		

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/770,916

DATE: 01/29/2002
TIME: 12:06:18

Input Set : A:\Mcw91481.app

Output Set: N:\CRF3\01292002\I770916.raw

```

191 gac acc gca cca gtc ctg gac tct gac ggt tct tac ttc ata tat agc 1349
192 Asp Thr Ala Pro Val Leu Asp Ser Asp Gly Ser Tyr Phe Ile Tyr Ser
193 425 430 435
195 aag ctc aat atg aaa aca agc aag tgg gag aaa aca gat tcc ttc tca 1397
196 Lys Leu Asn Met Lys Thr Ser Lys Trp Glu Lys Thr Asp Ser Phe Ser
197 440 445 450 455
199 tgc aac gtg aga cac gag ggt ctg aaa aat tac tac ctg aag aag acc 1445
200 Cys Asn Val Arg His Glu Gly Leu Lys Asn Tyr Tyr Leu Lys Lys Thr
201 460 465 470
203 atc tcc cgg tct ccg ggt aaa tgagctcagc acccaciaaag ctctcaggtc 1496
204 Ile Ser Arg Ser Pro Gly Lys
205 475
207 ctaagagaca ctggcaccga tatccatgca tcccttgat aaataaagca tccagcaaag 1556
209 cctggtacca tgtaaaaaaa aaaaaaaa aa 1588
212 <210> SEQ ID NO: 2
213 <211> LENGTH: 478
214 <212> TYPE: PRT
215 <213> ORGANISM: mouse
217 <400> SEQUENCE: 2
218 Met Ala Val Leu Gly Leu Leu Phe Cys Leu Val Thr Phe Pro Ser Cys
219 1 5 10 15
221 Val Leu Ser Gln Val Gln Leu Lys Gln Ser Gly Pro Gly Leu Val Gln
222 20 25 30
224 Pro Ser Gln Ser Leu Ser Ile Thr Cys Thr Val Ser Gly Phe Ser Leu
225 35 40 45
227 Thr Ser Tyr Gly Val His Trp Val Arg Gln Ser Pro Gly Lys Gly Leu
228 50 55 60
230 Glu Trp Leu Gly Val Ile Trp Ser Gly Gly Asp Thr Asp Tyr Asn Ala
231 65 70 75 80
233 Ala Phe Ile Ser Arg Leu Ser Ile Ser Lys Asp Asn Ser Lys Ser Gln
234 85 90 95
236 Leu Phe Phe Lys Met Asn Ser Leu Arg Ala Thr Asp Thr Ala Ile Tyr
237 100 105 110
239 Tyr Cys Ala Arg Asn Arg Gly Asp Ile Tyr Tyr Asp Phe Thr Tyr Ala
240 115 120 125
242 Met Asp Tyr Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser Ala Lys
243 130 135 140
245 Thr Thr Pro Pro Ser Val Tyr Pro Leu Ala Pro Gly Cys Gly Asp Thr
246 145 150 155 160
248 Thr Gly Ser Ser Val Thr Leu Gly Cys Leu Val Lys Gly Tyr Phe Pro
249 165 170 175
251 Glu Ser Val Thr Val Thr Trp Asn Ser Gly Ser Leu Ser Ser Val
252 180 185 190
254 His Thr Phe Pro Ala Leu Leu Gln Ser Gly Leu Tyr Thr Met Ser Ser
255 195 200 205
257 Ser Val Thr Val Pro Ser Ser Thr Trp Pro Ser Gln Thr Val Thr Cys
258 210 215 220
260 Ser Val Ala His Pro Ala Ser Ser Thr Thr Val Asp Lys Lys Leu Glu
261 225 230 235 240

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/770,916

DATE: 01/29/2002
TIME: 12:06:18

Input Set : A:\Mcw91481.app

Output Set: N:\CRF3\01292002\I770916.raw

263 Pro Ser Gly Pro Ile Ser Thr Ile Asn Pro Cys Pro Pro Cys Lys Glu
 264 245 250 255
 266 Cys His Lys Cys Pro Ala Pro Asn Leu Glu Gly Gly Pro Ser Val Phe
 267 260 265 270
 269 Ile Phe Pro Pro Asn Ile Lys Asp Val Leu Met Ile Ser Leu Thr Pro
 270 275 280 285
 272 Lys Val Thr Cys Val Val Val Asp Val Ser Glu Asp Asp Pro Asp Val
 273 290 295 300
 275 Gln Ile Ser Trp Phe Val Asn Asn Val Glu Val His Thr Ala Gln Thr
 276 305 310 315 320
 278 Gln Thr His Arg Glu Asp Tyr Asn Ser Thr Ile Arg Val Val Ser Thr
 279 325 330 335
 281 Leu Pro Ile Gln His Gln Asp Trp Met Ser Gly Lys Glu Phe Lys Cys
 282 340 345 350
 284 Lys Val Asn Asn Lys Asp Leu Pro Ser Pro Ile Glu Arg Thr Ile Ser
 285 355 360 365
 287 Lys Ile Lys Gly Leu Val Arg Ala Pro Gln Val Tyr Ile Leu Pro Pro
 288 370 375 380
 290 Pro Ala Glu Gln Leu Ser Arg Lys Asp Val Ser Leu Thr Cys Leu Val
 291 385 390 395 400
 293 Val Gly Phe Asn Pro Gly Asp Ile Ser Val Glu Trp Thr Ser Asn Gly
 294 405 410 415
 296 His Thr Glu Glu Asn Tyr Lys Asp Thr Ala Pro Val Leu Asp Ser Asp
 297 420 425 430
 299 Gly Ser Tyr Phe Ile Tyr Ser Lys Leu Asn Met Lys Thr Ser Lys Trp
 300 435 440 445
 302 Glu Lys Thr Asp Ser Phe Ser Cys Asn Val Arg His Glu Gly Leu Lys
 303 450 455 460
 305 Asn Tyr Tyr Leu Lys Lys Thr Ile Ser Arg Ser Pro Gly Lys
 306 465 470 475

310 <210> SEQ ID NO: 3

311 <211> LENGTH: 979

312 <212> TYPE: DNA

313 <213> ORGANISM: mouse

315 <220> FEATURE:

316 <221> NAME/KEY: CDS

317 <222> LOCATION: (44)..(745)

319 <220> FEATURE:

320 <221> NAME/KEY: sig_peptide

321 <222> LOCATION: (44)..(103)

323 <220> FEATURE:

324 <221> NAME/KEY: V_region

325 <222> LOCATION: (104)..(172)

326 <223> OTHER INFORMATION: FR1

328 <220> FEATURE:

329 <221> NAME/KEY: V_region

330 <222> LOCATION: (173)..(205)

331 <223> OTHER INFORMATION: CDR1

333 <220> FEATURE:

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/770,916

DATE: 01/29/2002
TIME: 12:06:19

Input Set : A:\Mcw91481.app
Output Set: N:\CRF3\01292002\I770916.raw